

**WHAT IS CLAIMED IS:**

1. A logo data generating method for creating logo data, comprising:

(a) a step for obtaining source data including at least one of an image object, a graphic object and a text object, said source data having at least two colors;

5 (b) a parameter input step for enabling the inputting of parameters for processing said source data, said parameters including a color selection parameter for converting a color in said source data to a predefined color;

(c) a data processing step for processing said source data according to said input parameters; and

10 (d) an output step for outputting the processed source data as logo data after applying said data processing step (c).

2. A logo data generating method as described in claim 1, wherein the generated logo data is to be printed by a printer having at least two printable colors, and said parameter input step (b) further comprises at least:

15 (b1) a source data display step for displaying an image representation of said source data and;

(b2) a color selection step for freely selecting one of said printable colors, such that a color in said source data is converted to the selected printable color.

20 3. A logo data generating method as described in claim 2, wherein said source data display step (b1) further includes a color reduction step for generating first process data by reducing the number of colors in said source data to a specific smaller number when the number of colors used in said source data is greater than a predetermined number; and

25 wherein said logo data generating method further includes a step for displaying an image of the first process data and a color in said first process data is converted to the printable color selected by the color selection step (b2).

4. A logo data generating method as described in claim 3, wherein said predetermined number is number eight, and the first process data is displayed with eight or less colors.

5. A logo data generating method as described in claim 3, wherein said color reduction step further reduces the number of colors using at least one of a dithering process, an error diffusion process, and a simple color reduction process that replaces a group of color hues by a corresponding and predefined color.

6. A logo data generating method as described in claim 2, wherein the color selection step (b2) prohibits selection of a color not among said printable colors.

7. A logo data generating method as described in claim 2, wherein said printable colors are defined as the material colors viewable on a printed print medium, said material colors including the colors of ink or heat sensitive colorants available to the printer and the color of said print medium itself.

8. A logo data generating method as described in claim 7, wherein said printable colors include halftones that can be created by combining said material colors.

9. A logo data generating method as described in claim 8, wherein said halftones are expressed with combinations of the material colors each assigned to each dot in a pixel unit where each pixel unit consists of a plurality of adjacent dots.

10. A logo data generating method as described in claim 7, wherein said material colors include a first color, a second and a third color;

said first and second colors being defined by the ink colors or the heat sensitive colorants available to the printer, and said third color being defined by the color of said print medium.

11. A logo data generating method as described in claim 8, wherein said material colors includes a first color, a second, and a third color;

said first and second colors being defined by ink colors or the heat sensitive colorants available to the printer, and said third color being defined by the color of said print medium, and wherein said halftones are created by combining said first, second and third colors.

5 12. A logo data generating method as described in claim 10, wherein the first color is black and the second color is a predetermined chromatic color, and wherein the data processing step converts achromic parts of said source data to said first color, and converts chromatic parts of said source data to said second color.

10 13. A logo data generating method as described in claim 11, wherein said first color is black and said second color is a predetermined chromatic color other than black, and wherein in said color selection step (b2) the achromic parts of said source data are converted to halftones formed from said first color, and the chromatic parts of said source data are converted to halftones formed from said second color.

15 14. A logo data generating method as described in claim 1, wherein the generated logo data is to be printed by a printer and the parameter input step (b) further enables inputting printer-specific-data corresponding to functions of said printer for creating the logo data; and

wherein the data processing step (c) processes said source data according to said printer-specific data.

20 15. A logo data generating method as described in claim 1, wherein the parameter input step (b) further enables selecting one of said objects, and inputting the color selection for the selected object; and

the data processing step (c) converts a color in the selected object to said predefined color according to said color selection parameter.

25 16. A logo data generating method as described in claims 15, wherein the parameter input step (b) further enables inputting a second color selection parameter for gray scale images; and

the data processing step (c) converts the selected object to a gray scale image according to the brightness of the selected object, and assigns the color specified by said second color selection parameter to the resultant gray scale image.

17. A logo data generating method as described in claims 1, wherein the parameter input step (b) further enables inputting a second color selection parameter for gray scale images; and

the data processing step (c) converts said source data to a gray scale image according to the brightness of said source data, and assigns the color specified by said second color selection parameter to the resultant gray scale image.

10 18. A logo data generating method as described in claim 1, wherein the obtaining source data step (a) further includes:

(a1) a step for capturing at least one of said objects;

(a2) a step for enabling the editing of the captured object; and

(a3) a step for storing the edited object as said source data.

15 19. A logo data generating method as described in claim 18, wherein the edit enabling step (a2) enables the changing of at least one of the size and position of the captured object.

20 20. A logo data generating method as described in claim 18, wherein the storing step (a3) stores a plurality of edited objects as said source data, such that the parameter input step (b) enables inputting a separate one of said color selection parameter independently for each object.

21. A logo data generating method for creating logo data, comprising:

(a) a step for obtaining source data including at least one of an image object, a graphic object and a text object, said source data having at least two colors;

(b) a parameter input step for enabling the inputting of parameters for processing said source data, said parameters including a color selection parameter for converting a color in said source data to a predefined color;

(c) a first data processing step for processing said source data according to said input parameters;

(h) a first displaying step for displaying a reduced image representation of said source data after reducing said source data to a specific size;

(i) a second data processing step for processing the reduced source data from the reducing step (h) according to said input parameters from the parameter input step (b) in a manner similar to that of the first data processing step (c), and

(j) a second display step for displaying a reduced image representation of the resultant data processed in step (i), as a logo image.

22. A logo data generating method for creating logo data, comprising:

(a) a step for obtaining source data including at least one of an image object, a graphic object and a text object, said source data having at least two colors;

(b) a parameter input step for enabling the inputting of parameters for processing said source data, said parameters including a color selection parameter for converting a color in said source data to a predefined color;

(c) a data processing step for processing said source data according to said input parameters;

(e) a step for displaying a confirmation image of the processed source data processed in step (c);

(f) a step for confirming whether to save the processed source data; and

(g) a step for saving the processed source data processed in step (c) when it is confirmed in step (f) to save the processed source data, and repeating steps (b), (c), (e), and (f) when it is not confirmed in step (f) to save the processed source data.

23. A logo data generating method as described in claim 22, wherein the confirmation image display step (e) displays a reduced confirmation image, wherein

said reduced confirmation image is obtained by reducing said source data to a specific size, and processing the resultant, reduced source data according to said input parameters from the parameter input step (b) in a manner similar to that of the data processing step (c).

- 5 24. A logo data generating method as described in claim 22, wherein the parameter input step (b) further enables inputting a second color selection parameter for gray scale images, and

10 the data processing step (c) converts said source data to a gray scale image according to the brightness of said source data, and assigns the color specified by said second color selection parameter to said gray scale image; and

the displaying a confirmation image step (e) displays said gray scale image using said second color selection parameter.

25. A logo data generating method as described in claim 1, wherein the output step (d) saves the processed source data as a logo data file.

- 15 26. A logo data generating method as described in claim 25, wherein said logo data file contains a plurality of said objects, such that said objects are separately editable when said logo data file is reloaded.

- 20 27. A logo data generating method as described in claim 1, wherein the output step (d) sends the processed source data to a connected printer to undergo one of a printing operation by said printer and a storage operation within said printer..

28. A computer-readable data storage medium for storing a computer program for executing the steps of a logo data generating method as described in claim 1.

- 25 29. A data storage medium as described in claim 28, wherein said data storage medium is one of a Compact Disc, a floppy disc, a hard drive disk, and a magnetic recording tape.

30. A logo data generating system for creating logo data, comprising:

a source data capturing means for obtaining source data including at least one of an image object, a graphic object and a text object, said source data having at least two colors;

a source data display for displaying said source data;

5 a parameter input means for enabling the inputting of parameters for processing source data, said parameters including a color selection parameter for converting a color in said source data to a specific color as specified by said color selection parameter;

10 a data processor for processing said source data according to said parameters; and

an output means for outputting the processed source data output from said data processor as logo data.

31. A logo data generating system as described in claim 30, wherein said logo data is for storage in a printer having at least two printable colors, and said specific color is one of said printable colors.

32. A logo data generating system as described in claim 30, wherein said source data contains a combination of said objects, each independently editable.

33. A logo data generating system as described in claim 30, further comprising a color reduction means for implementing a color reduction process for reducing the number of colors in said source data to no more than a predefined number of colors when said source data contains a greater number of colors than said predefined number,

wherein said source data display displays said source data after undergoing said color reduction process.

25 34. A logo data generating system as described in claim 33, wherein said predefined number is number eight.

35. A logo data generating system as described in claim 33, wherein said color reduction process means reduces the number of colors in said source data by using one of a dithering technique, a error diffusion technique, and a simple color reduction technique.

5 36. A logo data generating system as described in claim 31, wherein said printable colors are defined as the material colors viewable on a printed print medium, said material colors including the colors of ink or heat sensitive colorants available to the printer and the color of said print medium itself, said color selection parameter being restricted to said material colors.

10 37. A logo data generating system as described in claim 31,  
 wherein said printable colors are defined as the material colors viewable on a printed print medium, said material colors including the colors of ink or heat sensitive colorants available to the printer and the color of said print medium itself;

15 wherein said data processor further includes a means for converting a color in said source data to halftones combining said material colors; and

wherein color selection parameter specifies said halftones.

38. A logo data generating system as described in claim 37, wherein said halftones are expressed with combinations of the printable colors each assigned to each dot of a pixel unit where each pixel unit consists of a plurality of adjacent dots.

20 39. A logo data generating system as described in claim 31, wherein said printable colors include black and a predefined chromatic color other than black, and

said data processor converts achromic parts of said source data to black and converts chromatic parts of said source data to said predefined chromatic color.

40. A logo data generating system as described in claim 30, wherein said  
 25 parameters for processing source data include an object selection parameter for selecting at least one of said objects, and said color selection parameter is associated with the selected object as specified by said object selection parameter; and



said data processor converts a color in the selected object to the color specified by said color selection parameter.

41. A logo data generating system as described in claim 40, wherein the color specified by said color selection parameter has an associated gray scale; and

5       said data processor converts the selected object to a gray scale image according to the brightness of the selected object, and assigns the color specified by said color selection parameter.

42. A logo data generating system as described in claims 30, wherein said the color specified by said color selection parameter is definable across a gray scale; and

10       the data processor converts said source data to a gray scale image according to the brightness of said source data, and assigns the color specified by said color selection parameter to the resultant gray scale image.

43. A logo data generating system for creating logo data, comprising:

15       a source data capturing means for obtaining source data including at least one of an image object, a graphic object and a text object, said source data having at least two colors;

      a source data display for displaying the source data;

20       a parameter input means for enabling the inputting of parameters for processing source data, said parameters including a color selection parameter for converting a color in said source data to a specific color as specified by said color selection parameter;

      a data processor for processing said source data according to said parameters; and

      a logo image display for displaying the processed image of said source data.

25       44. A logo data generating system as described in claims 43, further comprising an image reduction means for reducing said source data to a target size;

wherein said source data display displays the reduced source data created by said image reduction means; and

wherein said data processor processes the source data reduced by said image reduction means for display on said logo image display.

- 5 45. A logo data generating system as described in claim 44, wherein said logo image display continually displays the processed image of said source data until a parameter input through said parameter input means is changed and said data processor updates the processed image of said source data in accordance to the changed parameter, and said logo image display then displays the resultant newly re-processed imaged.
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